This document describes the waste diversion program being deployed for Earth Sciences Division space in Building 74 and adjacent trailers. This program has been designed by a group that includes stakeholders from the Earth Sciences Division, Facilities Custodial Services group, and Sustainable Berkeley Lab, which includes personnel from the Lab Directorate and EHSS' Environmental Management System. While attempts have been made in the past to implement compostable collection at the Laboratory, this program is taking a new approach to this challenge and is intended to serve as a model for a standard and comprehensive approach to waste diversion across the Lab. We appreciate your ongoing support and feedback to help make the program more effective.

#### **Overview**

As part of Sustainable Berkeley Lab's Waste Minimization and Diversion initiative, the waste diversion program at the Building 74 complex strives to maximize the diversion of non-hazardous solid waste from the landfill and provide a clear and acceptable level of service without over-taxing occupants or custodians.

Most non-hazardous solid waste can be diverted from landfills to recycling and compost facilities. By providing proper infrastructure (including bins, signage, and online resources), sufficient training, and resources for occupants and custodians, this program is targeting a sustained diversion of over 75% of waste from the landfill to recycling and compost, with a long-term goal of achieving zero waste.

The Waste Diversion Program may also result in additional benefits, such as:

- Providing greater transparency and feedback about the waste collection process and performance.
- Providing the ability to collect specialty recycling waste streams.
- Providing support to those who are personally committed to recycling and composting.
- Providing greater choice in workspace bins to better meet individual preferences.
- Reducing, in some cases, the area taken up by workspace bins, providing more personal space and a clear path for duck and cover.
- Reducing unnecessary expenditures on workspace bins.
- Optimizing custodial services and gaining efficiencies so that efforts can be redirected.
- Reducing the amount of repetitive motion and associated injuries among custodians.

### **Roles**

In the waste diversion program for the entire site, *Berkeley Lab* will provide standard, centralized waste diversion stations in one or more locations inside a building and possibly one or more locations outside a building. Locations will be chosen collaboratively with the divisions in the building and custodial staff. These stations are intended to provide a clear and consistent message that a comprehensive diversion program is in place, supported by custodians and divisions, and consistent with lab-wide contracts that service each building.

*Divisions* will provide workspace bins for recycling and landfill waste to its employees and oversee the implementation of localized waste diversion at the level of individual workspaces. Divisions will encourage employees to "self-serve" their workspace bins to central waste diversion stations.

*Building occupants, including employees, guests, and visitors,* will take all compostable material to central waste diversion stations. For recycling and landfill material, building occupants will be able

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to choose from a menu of workspace bins that best meet their individual circumstances, but remain consistent with the program. In other words, bins of different sizes will be made available. It is anticipated that over time, this approach will diminish the use of and need for workspace bins.

*Custodial personnel* will serve centralized waste stations daily, except weekends. Custodial staff will serve workspace bins on "detail day", which is scheduled to happen once a week for a given area of a building and includes other cleaning activities, such as vacuuming and dusting. Custodian vacation or leave time may result in occasional skipping of an area's detail day. Building managers know the scheduled day of the week for the "detail days" of specific areas of a building.

*Sustainable Berkeley Lab* will help deploy the program, address frequently asked questions, and provide general support to the program, including maintaining information resources and feedback mechanisms. Ongoing feedback from occupants and custodians is expected to be critical to improving the program and diversion rates over time. Sustainable Berkeley Lab will also provide to the divisions regular reporting of metrics indicating performance of the program.

## **Implementation**

For each building, the waste diversion program will begin with planning between the division(s) and Sustainable Berkeley Lab that includes:

- Choosing locations for centralized waste diversion stations.
- Ordering centralized waste diversion stations.
- Removing existing bins or adapting existing bins to ensure consistency with the program.
- Developing any new information required to support understanding of the program.

Next, the division(s) and Sustainable Berkeley Lab will hold one or more brown-bag session(s) to kick off the program that includes activities to:

- Introduce the program and answer questions.
- Allow occupants to meet custodians working in the building to understand the detail-day schedule and baseline service levels.
- Display options for workspace bins.

In parallel with the start of the program, the division(s) will work with their employees and guests to distribute and exchange workspace bins to best meet their needs. Sustainable Berkley Lab will maintain a collection of returned, useable workspace bins that can be used by other divisions free of charge.

## Feedback and Continual Improvement

To address any implementation problems that may arise, the program will identify a "resolution" team in advance that includes a representative of the division(s), Custodial Services, and Sustainable Berkeley Lab.

After the first six to 8 weeks of implementation, Sustainable Berkeley Lab will conduct a written survey for occupants and interviews with the custodians to evaluate the program. Sustainable Berkeley Lab will then work with the division(s) to address concerns and make program adjustments, in coordination with the resolution team.

Sustainable Berkeley Lab will also coordinate the collection of waste diversion data for ongoing feedback to the Division and its employees. This includes estimated weights of the compost,

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recycling, and landfill material streams. Additionally, annual evaluation surveys will track adequacy of service, satisfaction, and goal-achievement for all stakeholders. Once the program includes most Berkeley Lab divisions, Sustainable Berkeley Lab will evaluate the waste diversion of each division. The division with the greatest 12-month diversion rate will be featured in Sustainable Berkeley Lab communications and participants will be entered into a lottery to receive incentive prizes.

## **Waste Diversion Program Infrastructure Specific to Building 74 Complex**

#### Common Areas

- Kitchens/kitchenettes and some hallways will have 4-bin waste stations with separate bins for paper recycling, other recyclables, compost, and landfill waste. The "other recyclables" bin will collect materials such as empty bottles and cans and cleaned plastics.
- Narrower hallways, such as those in the trailers, will have a smaller, 4-bin waste stations with separate bins for paper recycling, other recyclables, compost, and landfill waste.
- The main entrances on the first and third floors outside of the building will have 3-bin waste stations with bins for recycling, compost, and landfill waste. Paper should be deposited in paper recycling bins inside the building.
- Printer/Copy/Mail Areas will have a recycling bin to collect clean, mixed paper for recycling.

### Office and Cubicle Areas

• Building occupants will have choices of recycling and landfill bins of differing sizes for use in their workspaces (e.g., workspace bins).

#### Lab Areas

- A menu of workspace bins will also be available for use inside laboratories.
- Over time, the program anticipates integrating with EHSS' Waste Management to develop centralized collection areas for special laboratory waste streams.

## **Expectations**

*Office* occupants will be expected to:

- Bring any compost and other wet waste directly to centralized waste diversion stations.
  These materials must not be stored in workspace bins.
- Sort recycling and landfill materials collected in workspace bins into the centralized waste diversion stations.
- Drain beverage containers of any remaining liquid before disposal.
- Report any implementation issues to Division staff.

### *Laboratory* users will be expected to:

- Triple-rinse laboratory glass to remove residual chemicals before depositing them in recycling bins.
- Dispose of biohazardous and broken glass in the appropriate methods established by EHSS.
- Identify significant laboratory waste streams to Division staff who will work with Sustainable Berkeley Lab to identify recycling opportunities.

## *Custodians* will be expected to:

- Pick up the compost and landfill wastes from centralized diversion stations daily to avoid odor and pest problems.
- Pick up recyclables from centralized waste diversion stations as needed.

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- Pick up recycling and landfill materials from workspace bins on detail day.
- Take waste to the appropriate dumpsters outside of the building to be hauled away by the contracting vendor.
- Report any implementation issues to their custodial supervisor.

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